## TWO NEW CALIFORNIA DOLICHOPODIDÆ<sup>1</sup>

## (Diptera)

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The following report deals with two species of apparently undescribed long-headed flies collected in California during 1939.

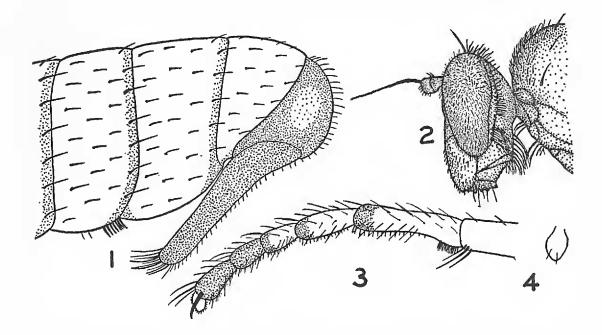
Thinophilus scopiventris Harmston and Knowlton, new species

Male. Length, 5.8 mm.; of wing, 6 mm. Face moderately wide, narrowest just below antennæ, greenish, with coarse brownish pollen which is thicker below longitudinal facial ridge; palpi (fig. 2) large, brownish-yellow, each about one and one-half times as large as face and covered with short, stiff, black hairs; front about twice the width of face, coppery-green, except a metallic violet, triangular-shaped, central area immediately below occellar tubercle: the portion of front immediately above antennæ and along orbits as far as occiput, lightly dusted with brownish-yellow pollen; antennæ black on upper half, yellow below, the third joint short, rounded at tip, the arista inserted near base above; lower orbital cilia and beard composed of stiff, yellowish-white hairs, among which are situated two short, black bristles; upper orbital cilia black. Dorsum of thorax and scutellum dusted with dark brown pollen which hides the greenish ground color except a central greenish vitta and posterior margin of mesonotum; lateral margins of scutellum shining greenish; one pair of large scutellar bristles outside of which is located a pair of small, hair-like bristles; pleuræ green, the anterior region dulled with brownish pollen, the posterior surface more greyish; calypters and halteres yellow, the former with delicate, whitish cilia. Abdomen metallic green with bronze reflections, dusted with grey pollen, the incisures blackish; bristles of thorax and abdomen entirely black; hypopygium (fig. 1) black, dulled with greyish pollen, rounded behind, with a pair of large, black, fleshy lamellæ, fringed with black delicate hairs which are long and curled at their tips; lamellæ reaching ventral hind margin of fourth abdominal segment, this margin not projecting below, but with a cluster of short, stiff bristles. Coxæ blackish green, dulled with greyish pollen; fore and middle pairs with coarse black hairs on anterior surfaces, the middle and hind pairs each with a long bristle on outside surface; femora and tibiæ brownish, nearly concolorous, yet the former nearly black on upper surfaces; all femora with strong bristles below, the posterior pair with six short bristles along apical half

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of upper, outer surface; fore tarsi (fig. 3) with last two joints and tips of first three joints, black, their basitarsi somewhat hollowed below, with a cluster of stiff bristles at base below and longer hair-like bristles along outer, lower surface; middle tarsi with fifth segment and tips of other segments black; hind tarsi wholly black. (Femora of female lighter than in male.) Wings greyish hyaline, without spots or infuscations; third and fourth veins nearly parallel beyond cross vein, the fourth vein ending in apex of wing.



Figures 1-3. Thinophilus scopiventris, n. sp., male. Figure 4. Chrysotus xanthocal, n. sp.

Described from one male and one female taken at Newark, California, June 27, 1939, by G. F. Knowlton, along the margin of a small stream running through alkaline land. The type is deposited in the collection of the California Academy of Sciences.

Taxonomy. In general outward appearance Thinophilus scopiventris, n. sp., resembles T. frontalis V. D., described from Florida; it differs, however, in having a brush of short, coarse bristles on the ventral, posterior margin of the fourth abdominal segment, strong bristles along the lower edge of the posterior femora and in having the legs of much darker color. An interesting feature of scopiventris is the striking similarity of structure and color in the fore and middle tarsi with those of T. spinipes V. D., a common Utah species; the latter species differs, however, in possessing a spot on the last portion of fourth vein and another on the cross vein, also in possessing wholly black femora.

Chrysotus xanthocal Harmston and Knowlton, new species

Male. Length, 2 mm.; of wing, 2 mm. Face narrow, showing greenish ground color lightly dusted with golden-yellow pollen between approximated eyes; front and occiput green, the former more bronze near middle and above base of antennæ; second and third antennal joints black, the latter small, somewhat triangular but with rounded tip, densely pubescent; first joint entirely yellow; arista about two and one-half times length of antenna; palpi (fig. 4) yellow, leaf-like, with two small blackish bristles near their tips; orbital cilia white, about five of the upper ones appearing brownish in certain lights, especially when viewed from behind. Dorsum of thorax shining metallic green, lightly dusted with yellow pollen along anterior and lateral margins; pleuræ of similar color to dorsum except that pollen is more dense and whitish. Abdomen shining, metallic green with bronze reflections; hypopygium more blackish, sub-shining, its appendages entirely imbedded; bristles of thorax and hairs of abdomen wholly black. Fore coxæ yellow, darkened at base, especially on outer face, their anterior surfaces with whitish hairs which are as long as the thickness of coxæ; middle and hind coxæ wholly dark, of greenishblack color; femora yellow; fore pair darkened along entire upper edge; middle pair entirely yellow; hind pair yellow with apical fifth blackened; fore and middle tibiæ yellow, hind pair brown; all tarsi blackish, without ornamentations; calypters yellow with black cilia; knobs of halteres lemon-yellow, their stems more brownish.

Described from one male, taken at Tracy, California, November 15, 1939, by F. C. Harmston and V. H. Harmston and deposited in the collection of the California Academy of Sciences.

Taxonomy. This species resembles both Chrysotus terminalis V. D. and C. picticornis Loew. From the former it is readily separated by the yellow palpi and the white hairs of the fore coxæ; both palpi and hairs of fore coxæ are black in terminalis. From C. picticornis it differs in having large, pendant palpi of a bright yellow color; the palpi of picticornis are small, whitish and lack the two bristles at their tips. Chrysotus xanthocal, n. sp., possesses apical fifth of posterior femora black, posterior tibiæ brown, whereas the corresponding structures in picticornis are wholly yellow.